

### What is Claimed

1. An abutment for use with an implant having a first end and a second end and a longitudinal axis passing through the first end, the implant having a bore formed through the first end and extending along the longitudinal axis, the abutment comprising a central portion between a post portion and a head portion, the post portion having a longitudinal axis and being receivable in the bore of the implant, the central portion formed with a smoothly curved outer surface extending from a relatively large diameter progressively down to a smaller diameter where the central portion joins the post portion, the head portion having a longitudinal axis and having a nose extending along the longitudinal axis to a rounded free end, a shelf being formed between the central portion and the nose, the shelf having an outer portion and an inner portion, the outer portion forming a selected angle with a plane perpendicular to the longitudinal axis of the head portion and the inner part forming a smooth curved surface with the nose, the shelf and nose adapted to support crown material received thereon.

2. An abutment according to claim 1 in which the central portion has a circumference and the distance between the free end of the nose and the outer part of the shelf is essentially constant around the circumference of the central portion.

3. An abutment according to claim 1 in which the central portion has a circumference and the distance between the free end of the nose and the outer part of the shelf varies around the circumference of the central portion in conformity with a selected gingival contour.
4. An abutment according to claim 1 in which the longitudinal axes of the head portion and the post portion are essentially collinear.
5. An abutment according to claim 1 in which the longitudinal axes of the head portion and the post portion are not collinear.
6. An abutment according to claim 1 in which the bore of the implant is formed with a self-holding taper and the post portion of the abutment is formed with a matching self-holding taper for receipt in the bore of the implant.
7. An abutment according to claim 1 in which the post portion is cylindrical without a taper and is attachable to an implant by an attachment media.
8. An abutment according to claim 1 in which the head portion is formed with a roughened surface for enhanced retention of prosthetic material applied directly to the abutment surface.

9. An abutment according to claim 1 further comprising prosthetic material including an opaque layer applied to the head portion and further including a tooth shaped prosthetic piece shaped to fit on the head portion for later attachment thereto and being adapted for final contouring and polishing to fit a specific clinical application.
10. An abutment according to claim 1 further comprising prosthetic material applied to the head portion.
11. A method of forming a crown on an abutment having a central portion between a post portion and a head portion, the head portion having a nose, a shelf having an outer and an inner peripheral part, the shelf extending between the nose and the central portion around the circumference of the central portion, comprising the steps of  
applying and shaping prosthetic material directly to the nose and shelf all around the circumference of the central portion, and  
polishing the outer surface of the prosthetic material and the adjacent external surface.
12. A method according to claim 11 further comprising the step of roughening the surface of the head portion prior to applying and shaping the prosthetic material to improve retention of the prosthetic material to the abutment.
13. A method according to claim 11 in which the roughening of the surface is accomplished by sandblasting with aluminum oxide particles.

14. A method according to claim 11 in which the shelf forms a smooth curved surface with the nose.
15. A method according to claim 11 in which the prosthetic material is selected from the group consisting of ceramics and porcelains, polymers, polyceramics and glass ionomers.
16. A method according to claim 11 in which the prosthetic material is a polyceramic material and further comprising the step of light curing the polyceramic material.